

What is claimed is:

1. A protein comprising the following amino acid sequence:

- (a) an amino acid sequence of SEQ ID No.1, or
(b) a modified amino acid sequence of SEQ ID No.1 which have antitumor activity wherein one or more amino acids are added and/or inserted into the amino acid sequence of SEQ ID No.1, and/or one or more amino acids in the amino acid sequence of SEQ ID No.1 are substituted and/or deleted.

2. A nucleotide molecule comprising a nucleotide sequence encoding a protein according to claim 1.

3. A nucleotide molecule according to claim 2 wherein said nucleotide sequence consists of a nucleotide sequence of SEQ ID NO.2.

4. A nucleotide molecule according to claim 2 which is derived from Tricholoma matsutake.

5. A vector comprising a nucleotide molecule according to claim 2.

6. A vector according to claim 5 which is selected from the group consisting of plasmid vectors, virus vectors, and liposome vectors.

7. A vector according to claim 5 which is selected from the group consisting of pBluescript SK(-), pBluescript SK(+), pGEX vector, pRIT2T, pBPV, pSVK3, pET vector, and pQE vector.

8. A host cell comprising a vector according to claim 5.

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9. A host cell according to claim 8 which is selected from the group consisting of E. coli, a yeast cell, Bacillus subtilis, a CHO cell, a COS cell, a human keratinocyte, a COP-5 cell, a C127 cell, a mouse 3T3 cell, a FR3T3 cell, and an HB101 cell.

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10. A host cell according to claim 8 which is E. coli selected from the group consisting of a SOLR strain, a JM109 strain, a SURE strain, a TOPP strain, and a BL21 strain.

11. A host cell according to claim 8 which is a yeast YRG-2 strain.

12. A process for preparing a protein according to claim 1, comprising culturing a host cell comprising a nucleotide sequence encoding a protein according to claim 1 and isolating said protein from a culture medium.

13. A pharmaceutical composition comprising a protein according to claim 1 together with a pharmaceutically acceptable carrier.

14. A pharmaceutical composition according to claim 13 which is used as an antitumor agent.

15. A method for treating tumor comprising administering an effect amount of a protein according to claim 1 to a mammal including a human.

16. An antibody to the protein according to claim 1.

17. An antibody according to claim 16 which is a polyclonal antibody.

31

18. A peptide consisting of any one of amino acid sequences of SEQ ID No. 3 to 18.

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